

AMENDMENTS TO THE CLAIMS

Please **AMEND** the claims as follows. This listing of claims replaces all prior versions of claims in this application

Listing of Claims:

1. (Currently amended) A saddle clamp for mounting on a vertebra and for carrying a bone-fixing member in a spinal fusion operation, the ~~vertebra having at one side thereof a pedicle, a superior facet with an edge, and a transverse process, said~~ saddle clamp having a rigid body with a contact surface for contacting the vertebra and comprising a saddle surface ~~configured to straddle the top of the pedicle between the transverse process and the superior facet when said saddle clamp is mounted on the vertebra, and a second surface configured to contact simultaneously said superior facet~~ and an arcuate surface, wherein:

the saddle surface is defined between a first down-turned arch and an up-turned arch lying in transverse planes and having a common point;

the arcuate surface is defined by a second down-turned arch and merges smoothly with the saddle surface; and

top-most points of the arcuate surface are higher than the first down-turned arch.

2. (Previously presented) The saddle clamp of Claim 19, wherein axes of at least two of said holes converge towards said bone.

3. (Previously presented) The saddle clamp of Claim 20, wherein said assembly element is a threaded pin protruding from said rigid body.

4. (Previously presented) The saddle clamp of Claim 20, wherein said assembly element is a threaded nut built into said rigid body.

5 – 6. (Canceled)

7. (Previously presented) The saddle clamp of Claim 19, wherein said first and second holes are positioned such that, when said saddle clamp is mounted to the vertebra, an axis of the first hole is directed into the pedicle and an axis of the second hole is directed into said edge and is convergent with the axis of the first hole.

8 – 9. (Canceled)

10. (Currently amended) A method for mounting a the saddle clamp of Claim 1 to a [[bone]] vertebra having a vertebra body and, at one side thereof, a pedicle, a superior facet with an edge, and a transverse process, said saddle clamp having a

rigid body with a contact surface for contacting the vertebra and comprising a saddle surface and an arcuate surface, wherein the saddle surface is defined between a first down-turned arch and an up-turned arch lying in transverse planes and having a common point, and the arcuate surface is defined by a second down-turned arch and merges smoothly with the saddle surface, top-most points of the arcuate surface being higher than the first down-turned arch, said method including:

[[-]] providing said saddle clamp with ~~suitably configured~~ contact surface and passing holes suitably configured for said [[bone]] vertebra;

[[-]] providing fixing elements;

[[-]] exposing a suitable area of said [[bone]] vertebra;

[[-]] drilling pilot holes in said [[bone]] vertebra corresponding to the passing holes, for anchoring said fixing elements, without penetrating further than the body of said pedicle, one pilot hole being drilled in said pedicle and a second pilot hole being drilled in said superior facet; and

[[-]] mounting said saddle clamp on said [[bone]] vertebra by inserting said fixing elements through the passing holes of said clamp and tightening them in the drilled pilot holes of said [[bone]] vertebra, without said fixing elements penetrating said vertebra body.

11. (Currently amended) The method of Claim 10, wherein said fixing elements are screws and ~~said holes in the bone are pilot holes~~.

12 – 14. (Canceled)

15. (Currently amended) The method of Claim 10 ~~Claim 14~~, wherein said second surface of the clamp is an arcuate surface adapted to receive said edge of the superior facet, and said second pilot hole is drilled into said edge.

16. (Currently amended) The method of Claim 10 ~~Claim 14~~, further including adjusting the surface of said vertebra to said saddle clamp by cutting a portion of said edge of the superior facet ~~[[edge]]~~.

17. (Currently amended) The method of Claim 10 ~~Claim 14~~, wherein said fixing elements are screws, or nails, or expanding anchors.

18. (Currently amended) The method of Claim 10 ~~Claim 14~~, wherein a second of said pilot holes is drilled with an axis convergent with the axis of a first pilot hole.

19. (Currently amended) The saddle clamp of Claim 1, wherein the rigid body comprises at least two holes for passing therethrough fixing elements to be tightened to the vertebra, a first of the holes passing through the saddle surface, and a second of the holes passing through the arcuate ~~second~~ surface.

20. (Previously presented) The saddle clamp of Claim 1, wherein said rigid body comprises at least one assembly element integral with the body for attaching thereto the bone-fixing member.

21. (Canceled)

22. (Currently amended) The saddle clamp of Claim 1 ~~Claim 21~~, wherein the rigid body comprises at least two holes for passing therethrough fixing elements to be tightened to the vertebra, a first of the holes passing through the saddle surface, and a second of the holes passing through the arcuate surface.

23. (Previously presented) The saddle clamp of Claim 22, being configured to have at least three points of contact with the vertebra when the saddle clamp is mounted thereon, at least two of the holes passing through the contact surface at least adjacent to two of the three points of contact so as to provide, upon tightening of the fixing elements, at least three spaced apart, non-collinear areas of contact and thereby firm attachment of the clamp to the vertebra.

24. (Canceled)